COASTAL CONSERVANCY

Staff Recommendation March 25, 2021

WILLIAMS CREEK RESTORATION PLAN

Project No. 11-025-05
Project Manager: Michael Bowen

RECOMMENDED ACTION: Authorization to disburse up to \$307,170 to the Humboldt County Resource Conservation District to conduct studies and prepare designs, permit applications, and a management plan for restoration of the Williams Creek watershed near Ferndale, Humboldt County, CA.

LOCATION: Williams Creek watershed near Ferndale, Humboldt County, CA.

EXHIBITS

Exhibit 1: Project Location Map

Exhibit 2: Project Photos
Exhibit 3: Project Letters

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed three hundred seven thousand one hundred seventy dollars (\$307,170) to the Humboldt County Resource Conservation District ("the grantee") to conduct studies and prepare designs, permit applications, and a management plan for the enhancement of the Williams Creek watershed near Ferndale, CA.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

- 1. A detailed work program, schedule, and budget.
- 2. Names and qualifications of any contractors to be retained in carrying out the project.
- 3. A plan for acknowledgement of Conservancy funding and Proposition 1 as the source of that funding.

Findings:

Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

- 1. The proposed authorization is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, regarding integrated coastal and marine resources protection.
- 2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.

PROJECT SUMMARY:

Staff recommends the Conservancy authorize disbursement of up to \$307,170 to the Humboldt County Resource Conservation District ("District") to conduct studies and prepare restoration designs and permit applications for the establishment of a sediment management area and the enhancement of the channel and banks of Williams Creek, a major tributary to the Salt River near Ferndale, Humboldt County. The enhancement of Williams Creek will substantially improve the function and habitat value of the nearby Salt River, a Conservancy-funded and District-led project that has been ongoing for many years.

Williams Creek is a coastal tributary in the Salt River watershed, located in the lower Eel River Delta system. Williams Creek is beset by high sediment loads from the upper watershed that deposit onto the delta, resulting in decreased channel capacity, increased flooding and ecological deterioration and diminished habitat value. This aspect of Williams Creek compromises the function of the recently restored Salt River downstream, and increases management needs throughout the project area. The project will establish a defined sediment management area while also enhancing the ecological function of the channel and banks of Williams Creek, currently lacking in clear channel formation or riparian vegetation. Plans will provide a clear hydraulic and habitat connection between the area where Williams Creek drops out of the Wildcat Hills and where it enters the Salt River. That connection will include a reexcavated channel, a sediment deposition area and riparian replanting to ensure good habitat value along the newly constructed creek channel.

The District completed 35% design work for this project to address these issues while also enhancing the Salt River Ecosystem Restoration Project (Salt River Project), now nearing completion. The proposed project consists of continued active community engagement, conducting environmental and supporting studies such as supplemental topographic surveys and a geotechnical site investigation, preparation of 65% designs and preparation of project permit applications. The design team will use the existing 30% design plans to develop the 65% design plans and supporting hydraulic modeling. Additionally, the project design team will update the existing basis of design report to document the basis for the 65% design. The report will include the methodology and results of the hydraulic modeling and description of the design decisions. The report will also include a description of the anticipated construction

means/methods, phasing and strategies for water management, revegetation and sediment reuse.

This project will also include the development of Williams Creek restoration permit applications and create project monitoring and management plans to help measure project success and provide guidance on maintenance and management of the Williams Creek Restoration Project, as well as integration into the long-term management of the Salt River Project. This planning portion of the project is exempt from CEQA requirements; however, CEQA documentation may be required in the future when the District prepares for implementation.

Site Description: The Salt River is one of the last tributaries to the Eel River before it enters into the Pacific Ocean in Humboldt County, CA. Williams Creek, located in Ferndale, is the largest upstream tributary to the Salt River and contributes 42% of the Salt River's freshwater flow. Williams Creek is a second order stream approximately eight miles in length. The Creek courses down approximately 6.3 miles through the higher gradient upper watershed and travels 2 miles through the lower gradient, trans-delta, reach before it enters the Salt River.

Land use in the upper watershed consists of large rangeland and non-industrial timber operations. A majority of the two-mile trans-delta stretch of Williams Creek in the lower watershed runs adjacent to, and through, large parcels of agricultural pastureland (each between 10 to 50 acres in size). Additionally, up to 30 residences are located in the trans-delta reach of Williams Creek.

Riparian habitat in the lower reach is primarily composed by a young and narrow deciduous vegetation (alder and willow) corridor surrounded by open pasture.

Due to the proximity of Williams Creek to the Eel River estuary, the Creek historically provided anadromous fish habitat. The upper watershed offered spawning and rearing environments and the low gradient reach provided productive rearing habitat. Today, salmonids (Coho, cutthroat, steelhead, and Chinook) are found throughout the Salt River watershed. Currently, Williams Creek is disconnected from the hydrologic system and diverted across pastures. Upon reconnection through the Salt River Project and after future restoration activities, Williams Creek should offer year-round habitat for all life stages of salmonids and other aquatic species once restored.

Grantee Qualifications: The District has administered multiple Conservancy grants in support of the Salt River Project and has demonstrated a high level of administrative and technical competence under a wide variety of conditions and in the face of frequent unexpected challenges.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

- 1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section below.
- 2. **Consistency with purposes of the funding source:** See the "Project Financing" section below.
- 3. **Promotion and implementation of state plans and policies:** The project is consistent with numerous state and federal plans and policies as outlined below:
 - a. The project is consistent with the recommendations for planning, acquisition and habitat enhancement made in the report Natural Resources of the Eel River Delta, published by the California Department of Fish and Game in November 1974. Among other things, the report recommended higher levels of protection for the Eel Delta's natural resources. The report advised restoration and floodplain enhancement efforts and acquisitions that would help advance ecosystem restoration —though they didn't use that expression—as a "highest and best use" of the Delta.
 - b. While it doesn't specifically address the Eel Delta, the Steelhead Restoration and Management Plan for California of February 1996 features the Eel River and underscores the importance of reversing watershed disturbance through restoration activities. Williams Creek is an historically important lower Eel river tributary and an important component of the estuary that provides spawning and rearing habitat close to the ocean. As such, it is high value habitat for Coho salmon, steelhead and coastal cutthroat trout. As part of the Eel River Delta, Williams Creek provides a refuge for juvenile salmonids, and other species, in an altered system. Thus, the project specifically addresses the Steelhead Plan's guidance to perform restoration activities and guidance that "(h)abitat improvement projects should be focused on the many areas throughout the State where steelhead habitat is severely degraded and restoration work is sorely needed." This is certainly true in the highly reclaimed Eel River Delta where opportunities abound to support the growth and survival of juvenile salmonids and other marine and freshwater species.
 - c. More recently, and more specifically, the Project is consistent with the California Fish and Game issued Recovery Strategy For California Coho Salmon of February 2004 in that the highest priority recommendation of that plan relating to the Eel Delta is to "(e)ncourage the Salt River Local Implementation Plan to incorporate coho salmon-friendly measures, in cooperation with the agencies." Advised in the early stages of project development, the District has since done so and developed the project in a way that has yielded impressive results in the form of increased coho salmon abundance on the newly restored Riverside Ranch and up to and including lower Williams Creek.

- d. The project is consistent with the Final Recovery Plan for the Southern
 Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon
 (Oncorhynchus kisutch) (National Marine Fisheries Service 2014). That report
 highlights the statewide importance of the Eel River population of Coho salmon
 and adds that "(t)he tributaries and estuary located within this population may
 serve as essential non-natal rearing habitats for all populations in the Eel River
 watershed" (SONCC 26-7). Williams Creek provides an important opportunity to
 reconnect a lower Eel river tributary to the Eel river via the tidally dominated Salt
 River. Doing so provides access to excellent non-natal rearing habitat consistent
 with the Plan.
- e. Finally, the project is consistent with the <u>California Water Action Plan</u>, a collaborative effort of the California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Food and Agriculture. This plan was developed to meet three broad objectives: more reliable water supplies, the restoration of species and habitat, and a more resilient, sustainably managed water resources system. It lays out the state's challenges, goals and actions needed to put California's water resources on a safer, more sustainable path. The plan identifies ten overarching strategies to protect our resources, include two particular to this project that the Conservancy can help implement: 4) Protect and restore important ecosystems (restore coastal watersheds and strategic coastal estuaries to restore ecological health and nature system connectivity to benefit local water systems and help defend against sea level rise, eliminate barriers to fish migration) and 7) Increase flood protection (encourage flood projects that plan for climate change and achieve multiple benefits).
- 4. Support of the public: The Salt River Project has received considerable support from the community and public agencies and representatives over the past several years. The project design and the monitoring of its effects has grown out of ongoing, active collaboration between the Department of Fish and Wildlife, NOAA/NMFS, US Fish and Wildlife Service, Natural Resources Conservation Service, Army Corps of Engineers, Coastal Commission, State Lands Commission, State Water Resources Control Board, County of Humboldt, City of Ferndale, and a range of professionals. Funding partners include the USFWS Coastal Program/Partners for Fish and Wildlife, Ducks Unlimited, NOAA/National Marine Fisheries Service, Natural Resources Conservation Service, US Army Corps of Engineers, the State Coastal Conservancy, California Department of Fish and Wildlife, Humboldt County and many others. This project has also garnered the support of public representatives such as the region's US Congressman, State Senator, State Assemblyman, and County Supervisor.

The District expects to leverage the long-term support of the entities and individuals described above for the planning and ultimate restoration of Williams Creek. The Salt River Watershed Council and community members actively support the restoration of Williams

Creek to alleviate the chronic and economically damaging flooding of pastureland and residential areas within the watershed. The Williams Creek community has actively participated in Williams Creek planning and update meetings.

- 5. Location: See the "Project Summary".
- 6. **Need:** The Williams Creek community is desperate for flood relief. They have outreached to the District, County departments, Natural Resources Conservation Service, and government representatives to find a solution. The District seeks funding to advance the project at this stage so that a resolution is not delayed further. Funding of this proposed project now would contribute significant funds at a strategic time to continue this needed planning process.
- 7. **Greater-than-local interest:** By significantly advancing state and federal species recovery plans (Section 3, above), the project demonstrates a greater than local interest.
- 8. **Sea level rise vulnerability:** The project site is located at an elevation significant enough to not be vulnerable to projected sea level rise.

Additional Criteria

- 9. **Urgency:** If funded now, the project will dovetail with the completion of the Salt River Project, thereby providing a more substantial habitat improvement for the Salt River Project and flood alleviation for the City of Ferndale.
- 10. **Resolution of more than one issue**: The project will provide designs and permit applications for a project that will alleviate nuisance flooding while expanding the habitat benefits of the Salt River Project.
- 11. Leverage: See the "Project Financing" section below.
- 12. **Conflict resolution**: Ironically, the project area is arguably the genesis of the Salt River Project. It was within the project area that two landowners in pitched hydraulic battle set out to shift the flow of water using tractors, downed trees and other devices. The nuisance flooding that ensued led, decades later, to the implementation of the Salt River Project, although the project never included this unfortunate "source of the Nile." Now, come full circle, the project seeks to address the Williams Creek area contributing to and confounding drainage patterns and diminished habitat value in the upper Salt River watershed.
- 13. Innovation: The natural pattern of sediment deposition into a delta is, unfortunately, incompatible with the settlement pattern and land use of the area. Traditional flood control approaches will not work here, however. Therefore, the District and its team is pursuing a novel and innovative approach of establishing a sediment deposition area capable of functioning as a flood plain and enabling a greater durability and habitat functionality for the Williams Creek channel. Future maintenance will be the responsibility of the property owners within the project footprint, thereby avoiding future burdens on either the District or the project funders.

- 14. **Readiness**: The District is already concluding preliminary designs and is prepared to advance the design work if funding is approved.
- 15. **Realization of prior Conservancy goals**: The Conservancy's commitment to the Salt River Project dates back to the late 1980s. At that time the Conservancy provided the then new District with its first grant to explore alternatives for alleviating flooding in the Ferndale area.

Since that time, the Conservancy has disbursed nearly \$4 million towards advancing the Salt River Project, including feasibility studies, design work, engineering and hydrology, acquiring property, securing public access, and funding implementation. In addition, staff has dedicated years of staff time towards developing this multi-benefit project. Since the award of the final design grant and implementation grant the District has succeeded in bringing three major construction seasons to fruition, achieving better than expected results for agricultural enhancement and ecosystem restoration. By improving the hydraulic and ecological connection between Williams Creek and the Salt River, the project is a natural extension and amplification of earlier Conservancy commitments.

- 16. Cooperation: See "Support of the Public" above.
- 17. **Vulnerability from climate change impacts other than sea level rise:** The project is a planning project, so it has no inherent vulnerability to climate change impacts. However, the design will account for increased frequency and severity of precipitation and flood events associated with climate change.
- 18. **Minimization of greenhouse gas emissions:** The project is a planning project, so it has minimal GHG emissions.

PROJECT FINANCING

Coastal Conservancy	\$307 , 170
National Fish and Wildlife Foundation	\$40,000
Project Total	\$347,170

The expected source of Conservancy funds for this project are funds appropriated to the Conservancy from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code § 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with § 79730) and may be used "for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state" (Section 79731).

Section 79732(a) identifies specific purposes of Chapter 6 and includes: (1) protect and increase the economic benefits arising from healthy watersheds, fishery resources, and instream flow; (4) Protect and restore aquatic, wetland, and migratory bird ecosystems, including fish and wildlife corridors and the acquisition of water rights for instream flow; (6) Remove barriers to fish passage; (10) Protect and restore coastal watersheds, including, but not limited to, bays,

marine estuaries, and nearshore ecosystems, and; (12) Assist in the recovery of endangered, threatened, or migratory species by improving watershed health, instream flows, fish passage, coastal or inland wetland restoration, or other means, such as natural community conservation plan and habitat conservation plan implementation.

The project helps achieve the above-identified Chapter 6 purposes and provides multiple benefits. By developing plans to restore channel form and function, the project will restore historic access to spawning and rearing habitat, improve water quality by preventing and reducing erosion and reduce flooding. The proposed project was selected through a competitive grant process under the Conservancy's Proposition 1 Grant Program Guidelines adopted in June 2015 ("Prop 1 Guidelines"). (See § 79706(a)). The proposed project meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail in this "Project Financing" section, the "Project Summary" section and in the "Consistency with Conservancy's Project Selection Criteria & Guidelines" section of this report.

The project is also receiving design funding from the Fish and Wildlife Foundation Coastal Resilience Fund.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The project is authorized pursuant to Chapter 5.5 of the Conservancy's enabling legislation, Public Resource Code section 31220. Pursuant to section 31220(b), the Conservancy may award grants in order to improve and protect coastal and marine water quality and habitat, including projects that restore fish habitat within coastal watersheds (31220(b)(2)), and projects that protect and restore floodplains and other sensitive watershed lands, especially watershed lands draining to sensitive coastal or marine areas (31220(b)(6)). As discussed above, the project will benefit coho salmon and will improve water quality in a coastal watershed by restoring natural hydrologic function and increased fish passage opportunity while also reducing water quality impacts. As required by Section 31220(a), staff has consulted with State Water Resources Control Board. Staff also consulted with the Division of Water Rights and the North Coast Regional Water Quality Control Board about the project and reached consensus that the project will help enhance the beneficial uses, such as cold-water fisheries, identified in the basin plan for the Eel River. Finally, consistent with section 31220(c), the project will establish criteria to be used to monitor and evaluate the restoration, once implemented.

CONSISTENCY WITH CONSERVANCY'S 2018-2022 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objective C** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will develop one plan to preserve and enhance coastal watersheds and floodplains.

Consistent with **Goal 7, Objective A** of the Conservancy's 2018-2022 Strategic Plan, the project will develop plans for a project that by better managing flood flows and sediment deposition, while enhancing habitat along Williams Creek, fosters the long-term viability of coastal working lands, and will assist farmers and ranchers to reduce impacts of their operations on wildlife habitat and water quality within the Salt River watershed.

Consistent with **Goal 16, Objective A** of the Conservancy's 2018-2022 Strategic Plan, the project will provide funding in a disadvantaged community.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

This multi-beneficial project supports the North Coast Regional Integrated Water Management Plan's goals and objectives by working collaboratively to reduce flooding impacts across residential and public property while enhancing fish and wildlife habitat. This project will address the following goals and objectives:

- Respect local autonomy and local knowledge in Plan and project development and implementation;
- Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCIRWMP project implementation;
- Ensure the economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities;
- Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas;
- Conserve, enhance and restore watershed and aquatic ecosystems, including functions habitats, and elements that support biological diversity;
- Enhance salmonid populations by conserving, enhancing and restoring required habitats and watershed processes;
- Ensure water supply reliability and quality for municipal, domestic, agricultural, cultural, and recreational uses while minimizing impacts to sensitive resources;
- Improve flood protection and reduce flood risk in support of public safety.

CEQA COMPLIANCE:

The project involves data collection and resource evaluation and is thus categorically exempt under CEQA, per §15306 pertaining to information collection activities that do not result in a serious or major disturbance to an environmental resource. These activities are part of a study leading to an action that Conservancy has not yet approved, adopted, or funded.

The project also involves preparation of designs, environmental studies, an operations plan, and permit applications, which are also exempt from the provisions of the CEQA pursuant to 14 Cal. Code of Regulations Section 15262, which exempts feasibility and planning studies for possible future actions not yet funded by the Conservancy. Consistent with this section, the project will consider environmental factors in the plan development and permit applications.

Conservancy staff will file a Notice of Exemption upon approval of the project.